

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (Withdrawn): A method of preparing a medicament or nutritional formulation for humans or animals for the treatment, testing for or prophylaxis of a disease or condition which is characterized by increased bone resorption, the method comprising adding  $\gamma$ -glutamyl-peptide to the medicament or nutritional formulation.

Claim 2 (Withdrawn): A method of treating a human or animal having a disease or condition that is characterized by increased bone resorption, the method comprising administering to a human or animal a medicament or nutritional formulation comprising an effective amount of  $\gamma$ -glutamyl-peptide.

Claim 3 (Withdrawn): The method of claim 2 wherein the human or animal is in need of  $\gamma$ -glutamyl-peptide.

Claim 4 (Withdrawn): The method of claim 2 wherein bone resorption is inhibited.

Claim 5 (Withdrawn): A method of treating, testing for or preventing a disease or condition which is characterized by increased bone resorption, the method comprising administering to a human or animal in need thereof an effective amount of  $\gamma$ -glutamyl-peptide.

Claim 6 (Withdrawn): A method of dietary management of increased bone resorption, the method comprising adding  $\gamma$ -glutamyl-peptide to the diet of a human or animal.

Claim 7 (Withdrawn): The method of claim 6 wherein the  $\gamma$ -glutamyl-peptide is selected from the group consisting of  $\gamma$ -glutamyl-alkyl-cysteine sulfoxide,  $\gamma$ -glutamy-alkenyl-cysteine sulfoxide, and any combination thereof.

Claim 8 (Withdrawn): The method of claim 1 wherein the  $\gamma$ -glutamyl-alkenyl-cysteine sulfoxide is  $\gamma$ -L-glutamyl-trans-S-1-propenyl-L-cysteine sulfoxide.

Claim 9 (Withdrawn): The method of claim 1 wherein the disease or condition which is characterized by increased bone resorption, is Paget's disease, tumor-induced bone disease or osteoporosis or any combination thereof.

Claim 10 (Previously Presented): A nutritional composition comprising a  $\gamma$ -glutamyl-peptide selected from the group consisting of  $\gamma$ -glutamyl-alkyl-cysteine sulfoxide,  $\gamma$ -glutamyl-alkenyl-cysteine sulfoxide, and combinations thereof, a nutritionally acceptable carrier, and a fat source.

Claim 11 (Cancelled):

Claim 12 (Previously Presented): The nutritional composition of Claim 10, wherein the  $\gamma$ -glutamyl-alkenyl-cysteine sulfoxide is  $\gamma$ -L-glutamyl-trans-S-1-propenyl-L-cysteine sulfoxide.

Claim 13 (Previously Presented): The nutritional composition of Claim 10 further comprising:

- (a) a calcium source,
- (b) at least one energy source selected from the group consisting of a carbohydrate source a nitrogen source, and combinations thereof, and optionally
- (c) Vitamin D.

Claim 14 (Previously Presented): The nutritional composition of Claim 13, wherein the calcium source (a) is an organic calcium salt.

Claim 15 (Previously Presented): The nutritional composition of Claim 13, wherein the carbohydrate source of component (b) is selected from the group consisting of maltodextrins, starch, lactose, glucose, sucrose, fructose, xylitol, sorbitol, and mixtures thereof.

Claim 16 (Previously Presented): The nutritional composition of Claim 10, wherein the fat source of component (b) is selected from the group consisting of omega-6 polyunsaturated fatty acid sources, omega-3 polyunsaturated fatty acid sources, mono-unsaturated fatty acid sources, C<sub>6</sub>-C<sub>12</sub>- fatty acid sources, and mixtures thereof.

Claim 17 (Previously Presented): The nutritional composition of Claim 13, wherein the nitrogen source of component (b) is selected from the group consisting of soy bean derived proteins; milk proteins, protein hydrolysates, a mixture of essential amino acids and arginine, and mixtures thereof.

Claim 18 (Previously Presented): The nutritional composition of Claim 13, wherein the carbohydrate source provides for 30 to 70 %, the nitrogen source for 5 to 40 %, and the fat source for 0.01 to 5 % of the total energy supply of the composition.

Claim 19 (Previously Presented): The nutritional composition of Claim 13 comprising from 3 to 25 % by weight of component (a), from 5 to 50 % by weight of component (b) and from 1 to 95 % by weight of component (c), based on the total weight of the nutritional composition.

Claim 20 (Previously Presented): The nutritional composition of Claim 10 further comprising 0.2 to 10 % by weight of other nutritionally acceptable components chosen from vitamins, minerals, trace elements, fibers, flavors, preservatives, colorants, sweeteners and emulsifiers.

Claim 21 (Previously Presented): The nutritional composition of Claim 10 in the form of a dietary supplement providing from 50 to 1500 kcal/day, or in the form of an animal feed supplement.

Claim 22 (Previously Presented): The nutritional composition of Claim 10 in liquid form.

Claim 23 (Previously Presented): The nutritional composition of Claim 10 in granulate or powder form.

Claim 24 (Previously Presented): A pharmaceutical composition in single unit dose form, comprising a  $\gamma$ -glutamyl-peptide selected from the group consisting of  $\gamma$ -glutamyl-alkyl-cysteine sulfoxide,  $\gamma$ -glutamyl-alkenyl-cysteine sulfoxide, and combinations thereof, a pharmaceutically acceptable carrier, and a fat source.

Claim 25 (Cancelled):

Claim 26 (Previously Presented): The pharmaceutical composition of Claim 24, wherein the  $\gamma$ -glutamyl-alkenyl-cysteine sulfoxide is  $\gamma$ -L-glutamyl-trans-S-1-propenyl-L-cysteine sulfoxide.

Claim 27 (Previously Presented): The pharmaceutical composition of Claim 24 for enteral administration in the form of a dragée, tablet, capsule, sachet or suppository.

Claim 28 (Previously Presented): The pharmaceutical composition of Claim 24 in the form of a veterinary composition.

Claim 29 (Previously Presented): A method of obtaining a  $\gamma$ -L-glutamyl-trans-S-1-propenyl-L-cysteine sulfoxide by fractionation of an hydrophilic, ethanolic extract of Allium, the method comprising the steps of:

- (a) obtaining an hydrophilic, ethanolic extract of Allium cepa, hereinafter referred to as fraction A, by using adsorption column chromatography[[,]] ;
- (b) separating saccharides from fraction A by using reversed-phase medium pressure liquid chromatography (RP-MPLC) to obtain fraction A1;
- (c) further separating saccharides from fraction A1 by NP-MPLC using chloroform – methanol – water 6.4:5:1 as mobile phase, to obtain fraction A1-4 ; and
- (d) further fractionation by semi-preparative reversed-phase HPLC (SP-RP-HPLC) using as solvent an isocratic water/acetonitrile system buffered with e.g. 0.00625% formic acid to obtain fraction A1-4C.

Claim 30 (Previously Presented): The method of Claim 29, wherein said Allium comprises Allium cepa, Allium ascalonicum, Allium ampeloprasum, Allium porrum, Allium schoenoprasum, Allium ursinum, Allium sativum or Allium fistulosum.

Claim 31 (Previously Presented): The method of Claim 30, wherein said allium comprises Allium ascalonicum, Allium porrum, Allium cepa, Allium ursinum.

Claim 32 (Previously Presented): The method of Claim 31, wherein said allium comprises allium cepa.

Claim 33 (Withdrawn): Process for producing a veterinary composition for the treatment or prophylaxis of a disease or condition in animal which is characterized by increased bone resorption or for the management of increased bone resorption in animal comprising homogenizing a mixture of one or more carriers that are physiologically acceptable to animals and an effective amount of a  $\gamma$ -glutamyl-peptide.

Claims 34-35 (Cancelled):

Claim 36 (Withdrawn): The use as claimed in claim 1 wherein  $\gamma$ -glutamyl-peptide inhibits dose-dependently the resorption activity of osteoclasts.

Claim 37 (Withdrawn): The use as claimed in claim 1 wherein the minimal effective dose is about 2 mM.

Claim 38 (Previously Presented): The nutritional composition as claimed in Claim 10, wherein  $\gamma$ -glutamyl-peptide inhibits dose-dependently the resorption activity of osteoclasts.

Claim 39 (Previously Presented): The nutritional composition as claimed in Claim 10, wherein the minimal effective dose is about 2 mM.

Claim 40 (Previously Presented): The nutritional composition as claimed in Claim 10, wherein the dose is at least 2 mM.

Claim 41 (Withdrawn): The use of claim 1 wherein the  $\gamma$ -glutamyl-peptide is selected from the group consisting of  $\gamma$ -glutamyl-alkyl-cysteine sulfoxide,  $\gamma$ -glutamyl-alkenyl-cysteine sulfoxide, and any combination thereof.

Claim 42 (Withdrawn): The method of claim 2 wherein the  $\gamma$ -glutamyl-peptide is selected from the group consisting of  $\gamma$ -glutamyl-alkyl-cysteine sulfoxide,  $\gamma$ -glutamyl-alkenyl-cysteine sulfoxide, and any combination thereof.

Claim 43 (Withdrawn): The method of claim 42 wherein the  $\gamma$ -glutamyl-alkenyl-cysteine sulfoxide is  $\gamma$ -L-glutamyl-trans-S-1-propenyl-L-cysteine sulfoxide.

Claim 44 (Withdrawn): The method of claim 5 wherein the disease or condition which is characterized by increased bone resorption, is Paget's disease, tumor-induced bone disease or osteoporosis or any combination thereof.

**Claim 45 (Previously Presented):** The pharmaceutical composition of Claim 24, wherein  $\gamma$ -glutamyl-peptide inhibits dose-dependently the resorption activity of osteoclasts.

**Claim 46 (Previously Presented):** The pharmaceutical composition of Claim 24, wherein the minimal effective dose is about 2 mM.

**Claim 47 (Previously Presented):** The pharmaceutical composition of Claim 24, wherein the dose is at least 2 mM.